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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/089,424	07/16/2002	Dieter Foedlmeier	1406/53	7014
25297	7590	10/20/2005		
JENKINS, WILSON & TAYLOR, P. A. 3100 TOWER BLVD SUITE 1400 DURHAM, NC 27707			EXAMINER YANCHUS III, PAUL B	
			ART UNIT	PAPER NUMBER
			2116	

DATE MAILED: 10/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/089,424	Applicant(s) FOEDLMEIER, DIETER	
	Examiner Paul B. Yanchus	Art Unit 2116	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This final office action is in response to communications filed on 8/1/2005.

For Applicant's convenience, a copy of the maintained claim rejections is included below.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-7 and 12 are rejected under 35 U.S.C. 102(e) as being anticipated by Moran, US Patent no. 6,091,617.

Regarding claim 1, Moran discloses a PCI bus interface circuit for the voltage supply of a PCI plug-in card that can be connected to a PCI bus, having:

a first input [V_{cc} in Figure 2] for connection to a main voltage supply line of the PCI bus [column 2, lines 36-41];

a second input [V_{aux} in Figure 2] for connection to an auxiliary voltage supply line of the PCI bus [column 2, lines 36-41];

an output for outputting a supply voltage to the PCI plug-in card [MAIN POWER SUPPLY FOR ADAPTER in Figure 2];

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a first switching device [Q3 in Figure 2] for switching a main supply voltage that is present at the first input to the output if no auxiliary supply voltage V_{aux} is present at the second input [column 2, lines 50-55];

a second switching device [Q2 in Figure 2] for switching an auxiliary supply voltage V_{aux} that is present at the second input to the output if no main supply voltage V_{cc} is present at the first input [column 2, lines 43-49]; and

a third switching device [Q1 in Figure 2], which, given the simultaneous presence of a main supply voltage V_{cc} at the first input and an auxiliary supply voltage V_{aux} at the second input, drives the second switching device for switching the auxiliary supply voltage V_{aux} through to the output [column 2, lines 43-49 and 62-67].

Regarding claims 2 and 3, Moran further discloses that the switching devices are transistors with each having control terminals [Figure 2].

Regarding claim 4, Moran further discloses that the switching devices are transistors, the third switching device being constructed complementarily with respect to the first and second switching devices [Figure 2].

Regarding claim 5, Moran further discloses that the control terminal of the first transistor is connected to the second input and the control terminal of the second transistor is connected to the first input [Figure 2].

Regarding claim 6, Moran further discloses that the control terminal of the third transistor is connected to the second input, the third transistor, when an auxiliary supply voltage is applied to the second input, turning on and connecting the control terminal of the second transistor to a

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specific voltage potential, with the results that the auxiliary supply voltage is switched through to the output [Figure 2 and column 2, lines 43-49 and 62-67].

Regarding claim 7, Moran further discloses that respective current limiting resistors are connected upstream of the control terminals of the first and second transistors [Figure 2].

Regarding claim 12, Moran discloses that V_{aux} is approximately 3.3 volts and that V_{cc} is approximately 5.0 volts, but a voltage regulator may be included to regulate the voltage level of V_{cc} [column 2, lines 40-43 and 55-57].

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moran, US Patent no. 6,091,617.

Regarding claim 8, Moran does not explicitly disclose using a voltage divider to adjust the switching point of the third transistor. However, voltage dividing circuitry is well known in the art. It would have been obvious to one of ordinary skill in the art to use well known voltage dividing circuitry to make the PCI bus interface circuit more flexible by adjusting the switching point of the third transistor.

Regarding claim 9, Moran does not explicitly disclose voltage detection circuitry for detecting the voltage level of the auxiliary voltage supply. However, voltage level detection

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circuitry is well known in the art. It would have been obvious to one of ordinary skill in the art include voltage level detection circuitry in the PCI bus interface circuit to ensure that the auxiliary voltage level is within the proper range.

Regarding claims 10 and 11, Moran does not explicitly disclose using transistors with less than a 0.1 volt voltage drop in the turned-on state. However, transistors with less than .1 volt voltage drops are well known in the art and it would have been obvious to one of ordinary skill in the art to use the well known low voltage drop transistors in the PCI bus interface circuit to reduce unnecessary voltage loss of the voltages supplied to the PCI card.

Response to Arguments

Applicant's arguments filed on 8/1/2005 have been fully considered but they are not persuasive.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., utilizing information regarding the presence of main supply voltage V_{cc} and an auxiliary supply voltage V_{aux} , at inputs for determining whether to activate switching devices) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

The rejections to claims 1-12 are respectfully maintained.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul B. Yanchus whose telephone number is (571) 272-3678. The examiner can normally be reached on Mon-Thurs 8:00-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne H. Browne can be reached on (571) 272-3670. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Paul Yanchus
October 17, 2005



LYNNE H. BROWNE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100